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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,643	12/21/2001	Yoshiharu Aruga	Q67848	2776

7590

07/25/2003

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EXAMINER

MOUTTET, BLAISE L

ART UNIT PAPER NUMBER

2853

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

10/024,643

Applicant(s)

ARUGA ET AL.

Examiner

Blaise L Mouttet

Art Unit

2853

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 July 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☐ The proposed amendment(s) will not be entered because:  
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ they raise the issue of new matter (see Note below);  
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.  
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:


Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: \_\_\_\_\_

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
10. ☐ Other: \_\_\_\_\_

  
Stephen D. Meier  
Primary Examiner

***Response to Arguments***

The applicant has argued that the examiner was incorrect in the application of Cook US 6,155,664 in the final rejection of claims 1-4 and 6-11. The applicant argues that only the ink consumption counter of Cook determines ink refill rather than both the ink consumption counter and an ink level sensor as taught by applicant.

The examiner disagrees.

The primary differences between applicant's claimed invention and that of Cook are not adequately recited in any of the rejected claim structure or method steps.

As disclosed by applicant two detections are performed in figure 8, S13 and S19. This has the advantage of increasing the reliability of the detection by supplementing the first detection (S13) which is based on an ink consumption counter by a second detection (S19) which is based on the level detector as described by applicant.

As disclosed by Cook, and as explained in the applied rejection, a simultaneous measurement of the ink level is obtained by a level sensor and a counter and these values are compared to determine if the counter is working properly. If the counter is working properly and a low ink level is detected refill occurs. There are clearly three possible conditions: both the counter and sensor detect a high ink level, the counter and sensor detect different ink levels or both the counter and sensor detect a low ink level. It is clear from figure 6 of Cook that only under the latter condition will ink be refilled since in the first condition the control will advance to step 165 and in the second condition control will advance to step 163 which both exclude refilling. Thus refill occurs only in the condition that both the sensor and the counter indicate a low ink level.

Art Unit: 2853

As seen by the examiner the primary difference between applicant's invention and the applied prior art is in that in applicant's invention the ink level detection is utilized to supplement the ink consumption counter whereas in Cook the ink level detection is utilized to verify the ink consumption counter. However, this aspect of applicant's invention has not been claimed or considered by the examiner during the review of the claims for compliance with 35 USC 102 or 35 USC 103.

The examiner also notes that apparatus claims are distinguishable from the prior art in terms of structure rather than function (see MPEP 2114) and while method step limitations might be claimed in terms of structure such as a controller which includes instructions to perform such steps no such structure is claimed in the apparatus claims presented.

The examiner also notes that, contrary to applicant's arguments, the method claims presented fail to present the limitation that the ink supplying is responsive to **both** the count referring and quantity detecting and only the count referral is referenced in this regard.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Blaise Mouttet whose telephone number is (703) 305-3007. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

Art Unit: 2853

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, Art Unit 2853, can be reached at (703) 308-4896. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Blaise Mouttet July 16, 2003

BM 7/16/2003